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FEDERAL - STATE - PRIVATE COOPERATIVE
SNOW SURVEY and WATER SUPPLY FORECASTS
for
COLORADO, RIO GRANDE, PLATTE
and ARKANSAS DRAINAGE BASINS

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE.
and
COLORADO AGRICULTURAL EXPERIMENT STATION,
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above
in cooperation with the U.S. Forest Service, National Park Service,
Bureau of Reclamation, State Engineers of Utah and Wyoming; and other
Federal, State and private organizations.

AS OF
APR. 1, 1958

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

TO RECIPIENTS OF COOPERATIVE SNOW SURVEY AND WATER SUPPLY FORECAST REPORTS:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Fortunately, most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from fore-knowledge of the runoff.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, about 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1300 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

By relating snow survey measurements taken over a period of years to spring-summer runoff during the same period, relationships have been developed which make it possible to forecast seasonal runoff several months in advance of occurrence. In order to make a forecast, once a forecast relationship has been developed, the maximum snow water content at previously selected key snow courses is usually entered in the forecast relationship. More accurate forecasts are often obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast relationships.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions.

PUBLISHED BY SOIL CONSERVATION SERVICE

REPORTS	ISSUED	COOPERATING WITH	LOCATION
RIVER BASINS			
COLORADO, RIO GRANDE	MONTHLY (FEB.-MAY),.....	COLO. EXP. STATION	FT. COLLINS, COLO.
AND PLATTE-ARKANSAS			
COLUMBIA <i>Includes Alaska</i>	MONTHLY (JAN.-MAY).....		BOISE, IDAHO
UPPER MISSOURI.....	MONTHLY (FEB.-MAY).....	MONT. AGR. EXP. STATION.....	BOZEMAN, MONTANA
WEST-WIDE.....	SEMI-ANNUALLY (OCT. 1 AND APR. 1).....	COOPERATORS	PORTLAND, OREGON

STATES			
ARIZONA.....	SEMI-MONTHLY..... (JAN. 15-APR. 1)	SALT R. VALLEY WATER..... USERS ASSOCIATION	PHOENIX, ARIZONA
NEVADA.....	MONTHLY (FEB.-APR.).....	NEVADA STATE ENGINEER.....	RENO, NEVADA
OREGON.....	MONTHLY (JAN.-MAY).....	ORE. AGR. EXP. STATION.....	PORTLAND, OREGON
UTAH.....	MONTHLY (JAN.-MAY).....	UTAH STATE ENGINEER UTAH AGR. EXP. STATION.....	SALT LAKE CITY, UTAH
WASHINGTON.....	MONTHLY (FEB.-MAY).....	WASH. STATE DEPT. OF CONSERVATION AND.....	SPOKANE, WASHINGTON
WYOMING.....	MONTHLY (FEB.-JUNE).....	WYOMING STATE ENGINEER.....	CASPER, WYOMING

Copies of the various reports may be secured from: Head, Water Supply Forecasting Section
Soil Conservation Service
209 S.W. 5th Avenue, Portland 4, Oregon

PUBLISHED BY OTHER AGENCIES

OTHER SNOW SURVEY REPORTS

BRITISH COLUMBIA.....	MONTHLY (FEB.-JUNE).....	COMPTROLLER, WATER RIGHTS BR., DEPT. OF LANDS AND FORESTS, PARLIAMENT BLDGS. VICTORIA, B.C.
CALIFORNIA.....	MONTHLY (FEB.-MAY).....	CALIFORNIA DEPARTMENT OF WATER RESOURCES, SACRAMENTO, CALIFORNIA

FEDERAL-STATE COOPERATIVE
SNOW SURVEYS AND WATER SUPPLY FORECASTS

for

COLORADO RIVER, PLATTE RIVER
ARKANSAS RIVER AND RIO GRANDE
DRAINAGE BASINS

Issued

April 10, 1958

Report Prepared By
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United States Department of Agriculture
Soil Conservation Service
and
Colorado Agricultural Experiment Station
Fort Collins, Colorado
and
State Engineer of Colorado
Denver, Colorado
and
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Issued By

Kenneth W. Chalmers State Conservationist Soil Conservation Service Colorado	R. A. Young State Conservationist Soil Conservation Service New Mexico	J. E. Whitten State Engineer State of Colorado
Sherman S. Wheeler, Director Colorado Agricultural Experiment Station	S. E. Reynolds State Engineer State of New Mexico	

General Series Paper No. 676
Colorado Agricultural Experiment Station

Snow Survey measurements in Wyoming, Utah, and Arizona are supplied by Snow Survey
Supervisors, Soil Conservation Service, in those states.

WATER SUPPLY OUTLOOK
COLORADO, RIO GRANDE, PLATTE AND ARKANSAS

April 1, 1958

WATER SUPPLY OUTLOOK CONTINUES TO BE GOOD IN ALL AREAS OF COLORADO AND NEW MEXICO IN 1958 AS WELL AS FOR COLORADO RIVER TRIBUTARIES IN UTAH AND WYOMING. SNOW COVER IN THE MOUNTAINS IS NEAR NORMAL IN COLORADO WITH SOME EXCESS IN SOUTHWESTERN COLORADO AND NORTHERN NEW MEXICO. IF SNOWFALL FOR THE REMAINDER OF THE SEASON IS NEAR AVERAGE NO SUBSTANTIAL SHORTAGES OR EXCESSES OF WATER ARE TO BE EXPECTED, EXCEPT FOR THE SAN JUAN BASIN. WATER SUPPLY OUTLOOK HAS CHANGED LITTLE SINCE FEBRUARY 1.

SURFACE WATER SUPPLY OUTLOOK IN ARIZONA IMPROVED SUBSTANTIALLY DURING MARCH BUT CONTINUED MODERATE USE OF GROUNDWATER MAY BE NECESSARY. SURFACE FLOW IS EXPECTED TO EXCEED NORMAL IN CENTRAL ARIZONA.

COLORADO. As indicated by the present snowpack, runoff from mountain streams will be near normal in 1958. If spring snowfall is normal or above, relatively heavy flows are expected for the San Juan and Dolores River drainages. The snowpack at the present time is just below that of May 15 and June 1, 1957. However, soil moisture under the snow is high at this time.

The water supply outlook is improved materially because of the relatively large carryover in storage from the heavy streamflow of 1957. Water in storage in most reservoirs is well above average and in some instances the reservoirs contain several times the amount stored on this date a year ago. Soil moisture in irrigated areas is regarded as good as compared to recent drouth years. Moisture under the snow is well above average in Southern and Western Colorado but relatively poor on the Northern tributaries to the South Platte.

Snow measurements will be continued over the state until June 1 at 15-day intervals to inventory the mountain snowpack. Rather large deviations from normal of snowfall in April and May will be required to cause shortages or excesses in water supply in most areas of the state.

NEW MEXICO. Snowfall in Northern New Mexico was relatively high during March. All snow measurements are now above average. With good soil moisture conditions under the snow it is expected that the flow of the Rio Grande and its tributaries through New Mexico will be near or above normal this year. Storage in Elephant Butte reservoir is about 85 percent of normal. Last year it was nearly empty.

ARIZONA. The irrigation water supply for Central Arizona improved during March. Early March storms increased mountain snowpack substantially. Early spring runoff is expected to be about 125 percent of normal. Moderate use of groundwater will have to be continued. Storage in the Salt and Gila River reservoirs is about 75 percent of average.

UTAH. Water content of the mountain snowpack on Colorado River tributaries in Utah ranges from normal on the Duchesne and Upper Green River to about 125 percent of normal on the Virgin and San Rafael Rivers in Southern Utah. Mountain and valley soil moisture conditions are excellent. Water supply along these streams in 1958 should be reasonably adequate.

COOPERATIVE SNOW SURVEYS
SUMMARY OF SNOW MEASUREMENTS
April 1, 1958

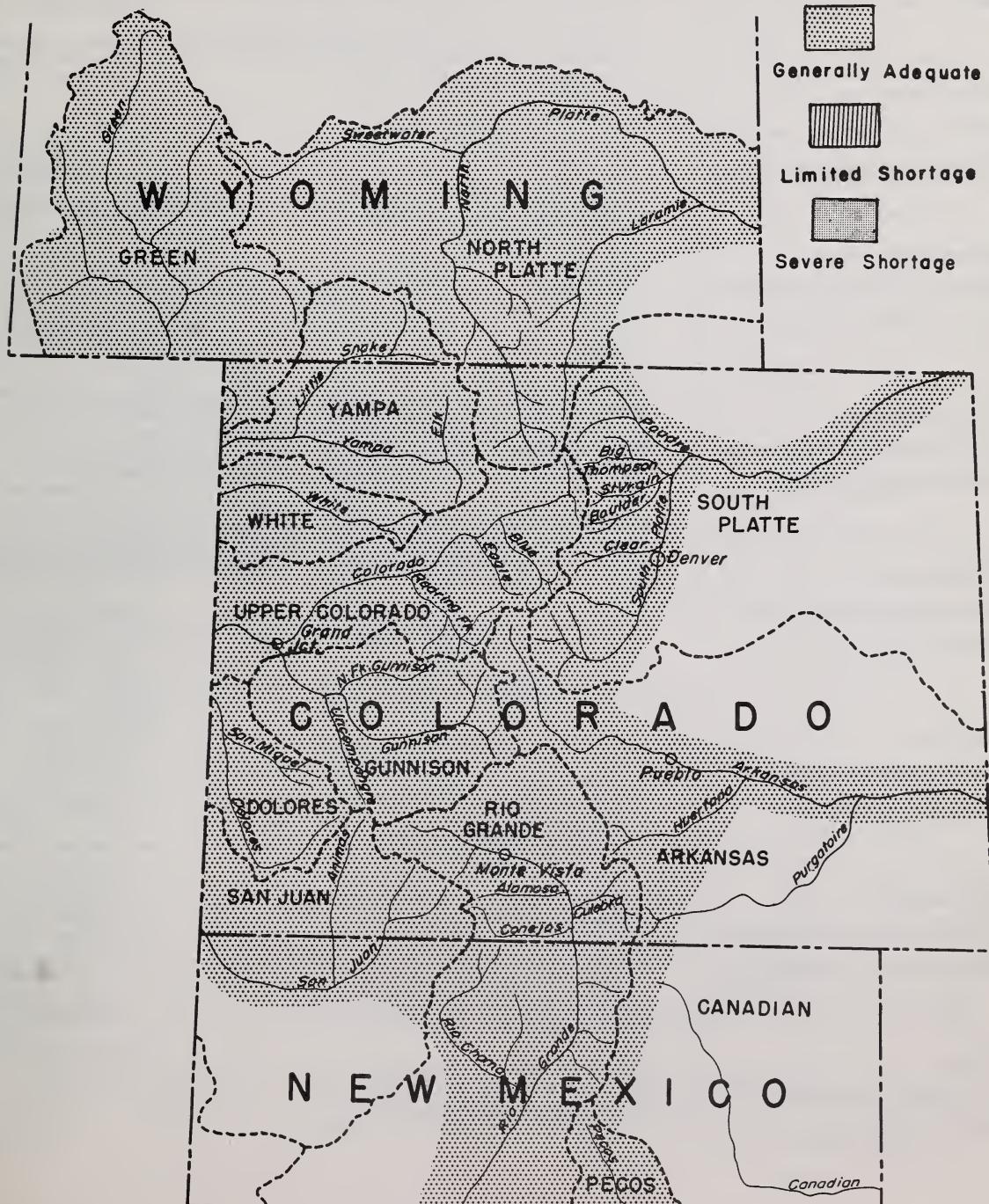
WATERSHEDS	No. of Courses Averaged	Years of Record	Water Content as percent of 1957	Avg.	WATERSHEDS	No. of Courses Averaged	Years of Record	Water Content as percent of 1957	Avg.
ARKANSAS RIVER					PLATTE RIVER				
Arkansas River	7	17-22	86	108	Sweetwater	2	18-21	61	55
COLORADO RIVER					North Platte River	10	20-22	87	108
Colorado River*	18	11-22	86	104	Laramie River	7	18-22	86	110
Roaring Fork	4	10-22	72	98	South Platte River**	2	17-22	93	117
Plateau Creek	2	18-21	118	123	Poudre River	6	18-22	92	121
Yampa River	5	22	86	109	Big Thompson River	2	17-20	89	97
White River	2	21-22	84	116	St. Vrain River	2	9-21	89	84
Gunnison River	6	18-22	97	110	Boulder Creek	1	21	68	94
Dolores River	3	20-22	105	133	Clear Creek	2	20-22	91	94
Green River (Wyo.)	5	18-22	91	96	RIO GRANDE				
San Juan River	5	15-22	78	101	Rio Grande (Colo.)	3	19-22	76	104
Animas River	6	7-22	107	163	Rio Grande (N.M.)	8	16-21	114	136
Gila River	6	16-18	--	400	Conejos River	2	21-22	53	76
Salt River	5	14-18	--	190	Chama River	4	16-22	80	107
Verde River	6	9-11	--	34	Pecos River	2	16-21	260	199
Little Colo. River	5	9-18	--	48	Canadian River	3	16-21	99	130
Williams River	2	11	--	--	Alamosa River	2	18-21	61-	87
Lower Colo. River	4	10-11	98	105					

*Above Glenwood Springs

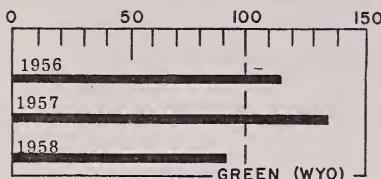
**Above Denver

WATER SUPPLY OUTLOOK

THE MAP ON THIS PAGE INDICATES THE MOST PROBABLE WATER SUPPLY AS OF THE DATE OF THIS REPORT. ESTIMATES ASSUME AVERAGE CONDITIONS OF SNOW FALL, PRECIPITATION AND OTHER FACTORS FROM THIS DATE TO THE END OF THE FORECAST PERIOD. AS THE SEASON PROGRESSES ACCURACY OF ESTIMATES IMPROVE. IN ADDITION TO EXPECTED STREAM-FLOW, RESERVOIR STORAGE, SOIL MOISTURE IN IRRIGATED AREAS, AND OTHER FACTORS ARE CONSIDERED IN ESTIMATING WATER SUPPLY. ESTIMATES APPLY TO IRRIGATED AREAS ALONG THE MAIN STREAMS AND MAY NOT INDICATE CONDITIONS ON SMALL TRIBUTARIES.



WATER SUPPLY OUTLOOK



THE BAR CHARTS ON THIS AND THE NEXT PAGE REPRESENT GRAPHICALLY THE MOST PROBABLY WATER SUPPLY OUTLOOK FOR 1958 AS COMPARED TO THE PAST YEARS 1956 AND 1957. STREAMFLOW AND OTHER FACTORS FOR 1957 ARE PARTIALLY ESTIMATED BECAUSE FULL DATA ON WATER SUPPLY CONDITIONS IS NOT YET AVAILABLE. ESTIMATES OF PAST CONDITIONS AND FORECASTS HAVE BEEN MADE BY THE AUTHORS OF THIS REPORT.

GREEN: The flow of the Green in Wyoming and Utah will be about average and adequate to meet local irrigation needs. Winter snow pack and fall precipitation have been near normal.

NORTH PLATTE: Water supply on the North Platte should meet demands this year even if late season snowfall is deficient. Present indications are for a little above normal inflow to Seminoe and Pathfinder reservoirs. In addition there is now stored in Seminoe, Pathfinder, Alcova and Guernsey reservoirs about 1,580,000 acre-feet which is almost twice normal and over twice that of a year ago. Of this amount about 900,000 acre-feet is assigned to the older North Platte project.

LARAMIE: At the present time the snow and soil moisture measurements indicate that streamflow will be slightly above normal on the Laramie River in 1958. With 80,000 acre-feet in storage in Wheatland Reservoir the water supply for the Wheatland area will be much better than for any recent year preceding last year.

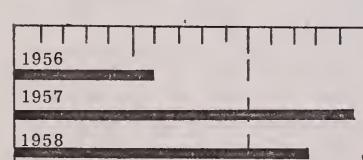
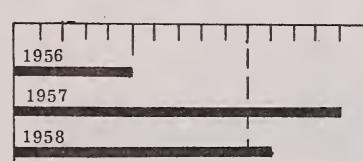
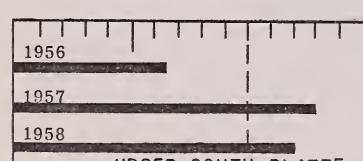
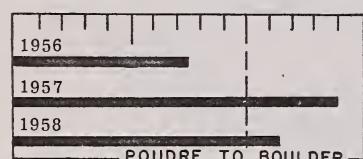
POUDRE-BOULDER: The flow of the Poudre, Big Thompson and Saint Vrain Rivers and Boulder Creeks will range from normal to slightly below normal for 1958. Snowpack on the Poudre is slightly above normal but on the other watersheds there is some deficiency. Water supply outlook is good. Storage is about 70 percent of capacity as compared to 25 percent a year ago in the smaller irrigation reservoirs. Soil moisture conditions in irrigated areas is much improved over the past few years. In addition to the natural water supply there is a total of about 225,000 acre-feet in Horsetooth and Carter Lakes and 360,000 acre-feet in Granby including dead storage. A full allotment has been made of this Colorado-Big Thompson water.

UPPER SOUTH PLATTE: Snow and soil moisture measurements indicate that the summer flow of the Upper South Platte River and Clear Creek will be near normal. Municipal reservoirs of the City of Denver were filled during snow melt last summer and are still at over 90 percent of capacity. Storage in irrigation reservoirs is also relatively high. Soil moisture conditions are good. An heavy excess of water is not probable.

LOWER SOUTH PLATTE: The water supply outlook for the lower South Platte is relatively good. Streamflow in this area is more dependent on summer rainfall and irrigation demands during the runoff period. Major reservoirs have more than a normal amount of water in storage and can be expected to fill from a better than average winter streamflow. If average snowfall continues and spring and summer rainfall is normal, this area will have a good water year.

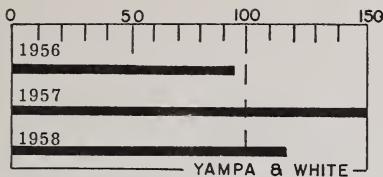
ARKANSAS: Snow accumulation is about normal. The most probable summer streamflow of the main stream at points above Pueblo will be slightly more than normal. In contrast to the past several years, reservoir storage is excellent. Last year storage throughout the valley was practically non-existent. John Martin reservoir now has in storage about 280,000 acre-feet. Usually the water content is near zero. This storage in reservoirs materially improves the outlook. In contrast to recent years, valley soil moisture is reported as good.

PURGATOIRE-CUCHARAS: Water supply outlook is fair to good for the Purgatoire, Cucharas and Huerfano Rivers. Much of the water supply depends on later precipitation.



Average

WATER SUPPLY OUTLOOK



YAMPA-WHITE: Snowpack is near normal on the headwaters of the Yampa River and somewhat above normal on the White River headwaters. Water supply for next year will be adequate to meet demands. No excessive streamflows are anticipated. Soil moisture conditions in valley areas are fair to good.

UPPER COLORADO: Snowpack and soil moisture conditions are about 105 percent of normal on the Upper Colorado River watershed. Summer streamflow should be slightly greater than average. Soil moisture conditions at lower elevations are good which indicates reasonably adequate water supplies for the smaller irrigated areas along tributary streams.

GUNNISON: Water supply outlook for irrigated areas served by the Gunnison, North Fork and Uncompahgre Rivers is good for 1958. Snowpack is slightly below normal on the Continental Divide but well above normal on the Grand Mesa and on Red Mountain Pass. Taylor Park reservoir contains 83,000 acre-feet as compared to 60,000 for normal and 25,000 a year ago. Soil moisture conditions in valley areas are good and streamflow is above normal.

SAN JUAN-ANIMAS: Snowfall in the San Juan mountains was relatively high during March. Summer flow of the Upper San Juan River is expected to be slightly above normal. The flow of the Los Pinos, Animas, Florida and other streams in this general areas will be much above normal. The combination of heavy snow and saturated mountain soils indicate that summer flow could equal or exceed that for the 1957 season. Water supplies will be adequate. Valley soils are wet. Recent streamflow is near two times average.

DOLORES: The summer flow of the Dolores will be above normal and may equal that for 1957. Snowpack is 105 percent of April 1, 1957 and 133 percent of normal. Mountain soils are saturated in direct contrast to a year ago. Soils on the Montezuma project are wet. Storage in Groundhog Reservoir stands at 15,600 acre-feet or near twice normal. If snowfall is over normal for the remainder of the season, concern for high streamflow is justified.

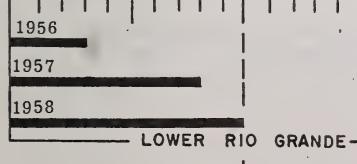
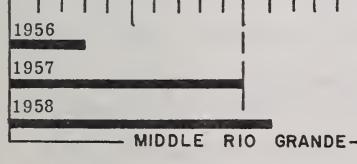
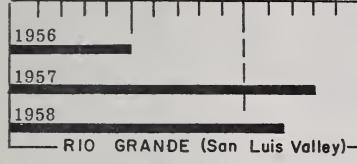
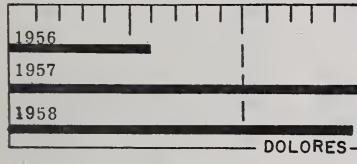
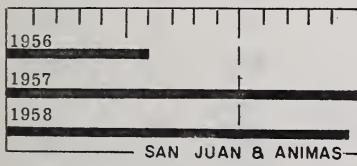
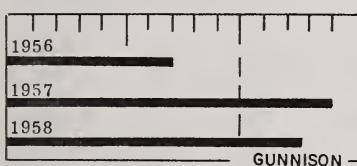
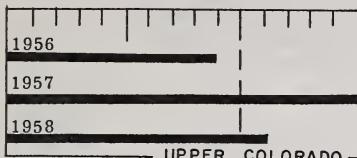
RIO GRANDE (San Luis Valley): Streamflow into San Luis Valley in the Rio Grande, Conejos and Alamosa Rivers will probably be slightly less than average for 1958 and less than for 1957. The water supply outlook is near average. Reservoir storage is between two and three times normal and perhaps ten times that of a year ago. Excessive streamflow in 1957 has been used to restore sub-soil moisture. Valley soil moisture conditions are described as good.

MIDDLE RIO GRANDE (New Mexico): Snowpack in Northern New Mexico is above normal for this date but not excessive. Soil moisture under the snow is, on the average, about three-quarters of capacity. The flow of the Rio Grande through the Middle Rio Grande Valley can be expected to be near normal this year. The flow of tributary streams will also be at least normal. The total water supply for the Middle Rio Grande District can be expected to be average or better this year.

LOWER RIO GRANDE (New Mexico): Inflow to Elephant Butte can be expected to be near normal this year. Much will depend on late season snowfall and summer storms. Storage in Elephant Butte and Caballo Reservoirs is now 825,000 acre-feet as compared to 70,000 a year ago. This is about 80 percent of the 1938-52 average and the highest storage for several years. The water supply outlook is at least average. If conditions are favorable, reservoir storage may be higher at the end of the season.

Water supply outlook for the Carlsbad Project on the Pecos River is good with 125,000 acre-feet of water stored in Alamogordo reservoir. Soil moisture conditions in the irrigated area are good.

FOR DETAILS ON WATER SUPPLY CONDITIONS ON THE COLORADO RIVER DRAINAGE IN UTAH AND ARIZONA, NOT LISTED OR DISCUSSED IN THIS REPORT, REFERENCES SHOULD BE MADE TO THE STATE SNOW REPORTS FOR UTAH AND ARIZONA (see inside cover).



Average

STREAMFLOW FORECASTS

APRIL-SEPTEMBER INCLUSIVE
April 1, 1958

"The following summarized runoff forecasts are based principally on mountain snow cover and on the assumption that precipitation and temperature during the forecast period will be near average. Appreciable deviations from normal of temperature and/or precipitation during the forecast period will correspondingly modify these forecasts."

BASIN AND STREAM	Forecast 1000 AF	15-Yr. %Avg. 1938-52		BASIN AND STREAM	Forecast 1000 AF	15-Yr. %Avg. 1938-52	
		Avg. 1938-52	Avg. 1938-52			Avg. 1938-52	Avg. 1938-52
NORTH PLATTE							
Sweetwater at Alcova	47	64	73	Gunnison at Gr. Junction	2,000	132	1,510
North Platte at Saratoga	800	122	657	San Juan at Rosa, N. M.	650	92	703
Medicine Bow near Hanna	116	104	111	Piedra at Piedra	270	125	215
Laramie at Jelm	121	115	105	Los Pinos nr Bayfield (7)	300	132	228
SOUTH PLATTE							
Cache La Poudre at Canon (1)	230	105	220	Florida nr Durango	90	130	69
Big Thompson at Drake	100	90	111	Animas at Durango	775	149	522
Saint Vrain at Lyons	80	91	88	La Plata at Hesperus	50	167	30
Boulder at Orodell	60	109	55	Dolores at Dolores	440	140	314
Clear Creek at Golden (2)	150	106	141	Colorado nr Grand Canyon, Arizona	11,300	112	10,069
ARKANSAS							
Arkansas at Salida (3)	400	124	323	GREEN RIVER			
Arkansas at Pueblo (3)	425	106	401	Green at Linwood, Utah	1,290	99	1,302
Cucharas at La Veta	16	100	16	Little Snake at Lily	450	123	365
Purgatoire at Trinidad	60	105	57	Elk at Clark	250	117	214
COLORADO							
Colorado nr Granby (4)	225	113	199	Yampa at Steamboat Spgs.	300	107	281
Willow nr Granby	50	116	43	White at Meeker	375	112	336
Blue abv Green Mt. Res.	310	101	307	RIO GRANDE			
Colorado at Glenwood Spgs. (5)	1,400	91	1540	South Fork at South Fork	135	102	132
Roaring Fork at Glenwood (6)	850	109	777	Rio Grande at Del Norte (8)	550	97	565
Plateau Creek at Collbran	80	129	62	Alamosa above Terrace Res.	65	83	78
Uncompahgre at Colona	225	132	170	Conejos at Mogote	180	82	220
Surface Cr. nr Cedaredge	25	139	18	Culebra at San Luis (9)	35	117	30
				Rio Chama nr La Puent	245	92	265
				Costilla at Costilla	34	100	34
				Rio Grande at Otowi Bridge (10)	825	97	851
				Rio Grande at San Marcial (10)	600	97	619
				Pecos at Pecos	80	129	62

(1) Observed flow minus diversions from Michigan, Colorado and Laramie Rivers, plus diversions for irrigation and municipal use.

(2) Observed flow minus diversions through Jones Pass Tunnel.

(3) Observed flow plus change in storage in Clear Creek, Twin Lakes and Sugar Loaf Reservoir's minus diversions through Busk-Ivanhoe and Twin Lake Tunnels and Ewing, Fremont Pass, Wurtz and Columbine Ditches.

(4) Observed flow plus diversions by Adams tunnel and Grand River ditch plus change in storage in Granby Reservoir.

(5) Observed flow plus the changes as indicated in (4) plus Moffat Ditch.

(6) Observed flow plus diversion through Twin Lakes tunnel.

(7) Observed flow plus changes in Vallecito Reservoir.

(8) Observed flow plus change in storage in Santa Maria, Rio Grande, and Continental Reservoir.

(9) Observed flow plus changes in storage in Sanchez Reservoir.

(10) Observed flow plus changes in storage in Santa Maria, Rio Grande, Continental, Terrace, Sanchez, Platoro and El Vado Reservoirs.

STATUS OF RESERVOIR STORAGE

April 1, 1958

RESERVOIR	USABLE STORAGE				RESERVOIR	USABLE STORAGE			
	USABLE CAPACITY	1000 A.F.		15-yr. Avg.		USABLE CAPACITY	1000 A.F.		15-yr. Avg.
	1000 A.F.	1958	1957	1938-52		1000 A.F.	1958	1957	1938-52
NORTH PLATTE DRAINAGE									
Kingsley	1900.0	1,076.0	640.0	1182.4*	Twin Lakes	57.9	39.3	8.4	25.2
Sutherland	70.0	44.0	55.5	51.1	Sugar Loaf	17.4	15.4	5.0	8.1
Minatare	58.8	33.2	23.6	23.8	Clear Creek	11.4	9.4	5.4	5.1
Alcova	166.0	188.1	171.7	91.1	Meredith	41.9	21.2	0	18.5
Seminole	970.0	561.7	270.3	305.4*	Horse Creek	26.9	22.3	0	9.1
Guernsey	44.3	30.0	5.9	40.1	Adobe Creek	61.6	57.9	0	26.4
Pathfinder	1040.5	797.0	318.2	456.1	Cucharas	40.0	17.0	0.6	6.1
Kortes	4.7	4.6	--	--	John Martin	655.0	278.1	3.8	78.6*
SOUTH PLATTE DRAINAGE									
Windsor	18.6	14.4	4.5	11.1	Great Plains	150.0	60.7	0	52.0
Cache la Poudre	9.5	8.4	5.3	6.8	Model	15.0	5.7	0.6	3.7
Fossil Creek	11.6	9.7	3.2	7.5	Conchas (NM)	600.0	250.6	154.4	261.7*
Terry Lake	8.2	5.8	4.2	4.5	W CAustin	151.0	92.4	--	-- *
Halligan	6.4	6.3	4.1	1.9	ARKANSAS DRAINAGE				
Chambers Lake	8.8	2.0	1.9	2.7	Twin Lakes	57.9	39.3	8.4	25.2
Cobb Lake	34.3	18.9	0.7	4.7	Sugar Loaf	17.4	15.4	5.0	8.1
Black Hollow	8.0	3.7	2.6	3.4	Clear Creek	11.4	9.4	5.4	5.1
Carter	112.4	103.8	74.9	-- *	Meredith	41.9	21.2	0	18.5
Horsetooth	143.5	128.1	101.3	-- *	Horse Creek	26.9	22.3	0	9.1
Lake Loveland	14.3	10.0	8.0	4.4	Adobe Creek	61.6	57.9	0	26.4
Boyd Lake	44.0	42.2	5.4	15.5	Cucharas	40.0	17.0	0.6	6.1
Lone Tree	9.2	7.6	2.7	6.2	John Martin	655.0	278.1	3.8	78.6*
Mariano	5.4	5.6	4.0	2.5	Great Plains	150.0	60.7	0	52.0
Union	12.7	12.4	2.3	7.1	Model	15.0	5.7	0.6	3.7
Eleven Mile	81.9	92.5	24.4	75.7	Conchas (NM)	600.0	250.6	154.4	261.7*
Cheeseman	79.0	79.1	25.0	56.6	W CAustin	151.0	92.4	--	-- *
Marston	18.9	16.0	13.4	15.3	COLORADO DRAINAGE				
Antero	33.0	17.8	0	14.0	Taylor Park	106.2	83.2	25.3	63.3
Gross	43.1	36.1	27.2	-- *	Vallecito	126.3	66.2	22.6	38.7*
Barr Lake	32.2	26.7	10.5	20.8	Groundhog	21.7	15.6	2.0	9.1
Milton	24.4	16.7	0	11.9	Granby	467.5	360.4	112.0	136.2*
Standley	18.5	16.4	6.3	12.1	Green Mountain	146.3	78.7	57.9	56.4*
Marshall	10.3	7.1	0.9	2.9	Lake Mead	27,207.0	19,092.0	11502.0	18493.0
Horse Creek	20.6	13.6	1.2	9.8	Lake Havasu	688.0	598.9	639.2	578.3
Riverside	57.5	57.5	26.3	46.6	Lake Mohave	1,810.3	1,737.9	1689.7	1113.9
Empire	37.7	34.1	25.8	30.4	RIO GRANDE (COLO) DRAINAGE				
Jackson Lake	35.4	34.2	34.3	33.4	Rio Grande	45.8	41.9	5.4	16.7
Prewitt	32.8	25.4	0	22.4	Santa Maria	45.0	14.9	3.3	9.9
Point of Rocks	70.0	64.6	33.6	57.3	Sanchez	103.2	36.1	5.7	13.2
Julesburg	28.2	19.7	22.2	21.5	Terrace	17.7	1.7	1.5	3.7
RIO GRANDE (N. M.) DRAINAGE									
Elephant Butte	2,273.7		710.5	67.6	Continental	26.7	12.0	3.8	7.5
Caballo			365.0	124.1	Platoro	60.0	30.5	0	-- *
El Vado			226.0		RIO GRANDE (N. M.) DRAINAGE				
Alamogordo			128.0	98.0	Roosevelt	1,382.0	263.6	159.5	516.9
McMillan-Avalon			37.0	28.0	Horse Mesa	245.1	238.8	162.1	194.5
Red Bluff(Tex)			307.0	35.9	Mormon Flat	58.0	54.0	50.1	43.7
SALT AND GILA DRAINAGE									
Saguaro			70.0	64.3	Saguaro	70.0	64.3	62.7	43.5
Bartlett			180.0	144.6	Bartlett	180.0	144.6	122.7	75.9
Horseshoe			143.0	106.2	Horseshoe	143.0	106.2	57.5	31.3
Carl Pleasant			163.8	22.3	Carl Pleasant	163.8	22.3	24.4	33.9*
San Carlos			1,205.0	176.0	San Carlos	1,205.0	176.0	0.2	205.9

* Shorter Period

VALLEY PRECIPITATION^{1/}
Division Averages and Departures^{3/}

April 1, 1958

DRAINAGE DIVISIONS	Fall					Winter					DRAINAGE DIVISIONS	Fall					Winter				
	Sept.	-Oct.	-Nov.	Dec.	Jan.	Feb.	Avg.	Dept.	Avg.	Dept.		Sept.	-Oct.	-Nov.	Dec.	Jan.	Feb.	Avg.	Dept.		
North Platte River, Wyo.	2.95		.13	1.20		-1.00					Colorado River, Ariz.										
South Platte River	3.20		.13	.85		-.81					Gila River, Arizona	3.50		.21	2.31				-.58		
Arkansas River	4.24		.11	1.33	1.32	-.66					Canadian River, N.M.	6.90		.36	.75				-.95		
Colorado River	5.22		.11	1.11	4.05	-.58					Rio Grande, Colo.	3.51		.03	.74				-.71		
Green River, Wyo.	2.48		-.06	1.17		-.49					Rio Grande (N), N.M.	5.77		.09	2.69				-.57		
San Juan River, N.M.	3.59		.74	2.03		-.76					Rio Grande (S), N.M.	3.06		.64	1.18				-.22		
											Pecos River, N.M.	7.14		.56	1.13				-.77		

1/ Preliminary analysis by U. S. Weather Bureau from data furnished by Meteorological Service & U. S. Weather Bureau

2/ Departure from average

3/ Selected Stations

SOIL MOISTURE MEASUREMENTS *

DRAINAGE BASIN AND STATION	Date	Root Zone Soil Moisture Content				DRAINAGE BASIN AND STATION	Date	Root Zone Soil Moisture Content			
		Cap	1958	1957	1956			Cap	1958	1957	1956
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
NORTH PLATTE						UPPER COLORADO					
Columbine Lodge	8.0	5.0	0.5	0.5		Vail Pass		8.0	7.4	3.9	7.6
Willow Creek	7.0	6.8	1.1	2.3		Ranch Creek		7.0	4.6	1.8	--
Windy Point						Hairpin		8.0	4.8	0.0	--
Barrett						Vasquez		7.0	5.2	3.9	--
SOUTH PLATTE						Gore Pass		7.0	1.5	1.7	--
Red Feather	6.0	0.7	0.5	0.6		Blue River		7.0	4.3	0.3	--
Chambers Lake	7.0	2.8	2.0	1.8	GUNNISON						
Deer Ridge	6.0	0.8	0.7	0.8	Monarch Pass		8.0	5.3	3.4	--	
Hidden Valley	8.0	3.8	2.0	3.0	RIO GRANDE (Colo.)						
Longs Peak	7.0	0.8	1.3	0.4	Bristol View		7.0		0.2	0.3	
University Camp	7.0	1.2	0.8	1.1	Wolf Creek Pass		9.0		0.7	3.4	
Berthoud Falls	6.0	1.9	0.3	1.2	River Springs		7.0		2.1	2.0	
Alma	7.0	2.7E	0.5	--	La Veta Pass		8.0		2.6	--	
Kenosha Pass	7.0	4.7E	0.9	--	RIO GRANDE (N.M.)						
ARKANSAS					Red River		7.0	3.6	0.7	0.4	
Leadville	7.0	1.9	1.2	1.3	Tres Ritos		7.0	5.6	2.5	2.1	
Lake Creek	6.0	3.7	2.7	--	Bateman		8.0	5.3	7.5	--	
Garfield	7.0	5.3	3.4	--	Chamita		8.0	7.3	7.5	--	
ROARING FORK											
Placita	8.0	6.9	7.5	7.6							
Maroon	8.0	3.0	0.7	2.1							

* Measurements made about April 1. Two to five years of record are available. Interpretation methods are tentative so numerical values may change in later years. E - Estimated - Soil frozen.

SNOW COURSE MEASUREMENTS

April 1, 1958

SNOW COURSE	Depth	Water Content		Years of Avg. Record	SNOW COURSE	Depth	Water Content		Years of Avg. Record			
	1958 Date	Inches	1958 Inches			1958 Date	Inches	1958 Inches				
**												
PLATTE RIVER DRAINAGE												
SWEETWATER RIVER												
Grannier Meadows	4/1	35	8.0	12.6	14.1	21						
South Pass*	4/1	34	8.0	13.7	14.9	18						
Larsen Creek	4/1	36	8.4	13.9	--	8						
NO. PLATTE RIVER												
Cameron Pass	3/31	85	29.4	29.7	21.8	22						
Park View	3/28	29	7.7	11.8	10.6	22						
Columbine Lodge	3/31	77	25.6	30.1	23.5	22						
Willow Cr. Pass*	3/28	42	10.8	16.6	13.5	20						
Northgate	4/1	24	7.6	9.2	--	8						
Bottle Creek	4/2	42	12.7	17.6	14.3	22						
Webber Spring	4/2	53	16.3	22.1	19.2	22						
Old Battle	4/2	96	33.8	38.5	32.3	22						
N. French Creek	4/1	104	38.3	37.8	30.1	20						
N. Barrett Creek	4/1	76	25.5	24.0	20.4	22						
Ryan Park	4/1	44	13.0	16.0	11.7	22						
Spring Creek			dropped									
Albany	3/27	49	14.4	15.8	--	9						
LaBonte	3/30	23	5.7	7.6	--	8						
Boxelder	3/31	24	5.9	7.2	--	8						
LARAMIE RIVER												
Roach	3/28	62	17.8	26.2	19.5	18						
Deadman Hill*	3/27	70	20.6	21.2	15.5	21						
McIntyre	4/1	40	10.8	15.6	--	8						
Brooklyn Lake	3/26	82	26.0	28.7	22.6	22						
Fox Park	3/31	37	9.1	7.4	8.0	22						
Pole Mtn.*	3/27	22	5.5	9.2	5.5	21						
Libby Lodge	3/26	40	10.8	12.6	10.3	22						
Hairpin Turn	3/26	43	12.5	14.2	11.9	22						
Albany	3/27	49	14.4	15.7	--	9						
POUDRE RIVER												
Cameron Pass	3/31	85	29.4	29.7	21.8	22						
Chambers Lake	3/30	35	10.7	12.8	8.2	22						
Big South	3/30	20	4.9	5.0	2.8	22						
Deadman Hill	3/27	70	20.6	21.2	15.5	21						
Lake Irene*	3/26	85	23.7	27.6	22.3	20						
Hour Glass Lake	3/27	33	7.2	8.6	9.1	18						
Red Feather	3/31	25	6.3	7.8	9.7	9						
Lost Lake	3/30	42	13.2	17.3	--	7						
BIG THOMPSON RIVER												
Lake Irene*	3/26	85	23.7	27.6	22.3	20						
Hidden Valley	3/30	42	9.9	10.0	12.5	17						
Deer Ridge	3/31	18	3.9	5.9	6.3	9						
Longs Peak	3/29	46	11.1	15.1	--	6						
Two-Mile	3/30	56	14.2	14.0	--	5						
ST. VRAIN RIVER												
Wild Basin	3/31	46	11.4	14.2	14.6	21						
Copeland Lake	3/31	19	5.7	5.0	5.7	9						
Ward	3/31	23	6.4	12.8E	--	8						
BOULDER CREEK												
University Camp	3/31	66	21.3	31.4	22.6	21						
Moffat	4/1	47	16.2	15.2	--	8						
Boulder Falls	3/31	44	11.0	19.5	--	5						
**												
PLATTE RIVER DRAINAGE												
CLEAR CREEK												
Loveland Pass	3/25	48	14.9	17.5	16.4	22						
Grizzly Peak*	3/25	61	18.6	19.2	19.1	20						
Empire	3/27	29	6.9	8.6	--	9						
Berthoud Falls	3/27	50	14.1	15.8	--	7						
Clear Creek	3/25	56	16.8	15.8	--	7						
**												
PLATTE RIVER DRAINAGE												
SOUTH PLATTE RIVER												
Hoosier Pass	3/30	52	15.0	15.3	12.7	22						
Jefferson Cr.	3/31	42	10.6	12.1	9.1	17						
Geneva Park	3/31	13	3.2	4.1	--	9						
**												
ARKANSAS RIVER DRAINAGE												
ARKANSAS RIVER												
Tennessee Pass	3/31	44	11.1	12.5	9.8	22						
Twin Lakes T.	3/27	47	15.1	14.2	10.8	22						
La Veta Pass*	3/28	27	7.2	9.8	9.7	22						
4 Mile Park	3/31	19	5.1	7.3	3.9	22						
Fremont Pass	3/26	59	15.9	18.2	16.6	22						
Blue Lakes	NS	NS	NS	11.5	7.0	20						
Monarch Pass	4/1	68	20.8	25.5	19.0	17						
Saint Elmo (a)	3/31	44	12.0	15.2	--	9						
Timberline	3/31	84	20.9	--	--	9						
East Fork	3/26	40	10.2	12.0	--	6						
Westcliffe	3/31	29	7.8	9.3	--	6						
Bourbon	3/31	29	8.9	10.4	--	2						
**												
COLORADO RIVER DRAINAGE												
COLORADO RIVER (Above Glenwood Springs)												
Cameron Pass*	3/31	85	29.4	29.7	21.8	22						
Phantom Valley	3/28	40	10.3	13.9	10.5	22						
Hoosier Pass*	3/30	52	15.0	15.3	12.7	22						
Berthoud Pass	3/31	59	17.0	17.9	16.1	22						
Tennessee Pass	3/31	44	11.1	12.5	9.8	22						
M. Fork Camp Gr	4/1	42	9.6	12.1	10.3	22						
Fiddler Gulch	3/30	61	15.8	19.8	16.5	21						
Lulu	3/29	69	20.6	20.2	17.7	20						
Willow Creek P.	3/28	42	10.8	16.6	13.5	20						
N. Inlet Grand L.	3/27	35	9.0	14.2	9.9	20						
Lake Irene	3/26	85	23.7	27.6	22.3	20						
Arrow	3/31	45	12.4	16.6	10.5	20						
Lapland	3/30	45	11.3	13.7	12.0	20						
Fremont Pass	3/26	59	15.9	18.2	16.6	22						
Lynx Pass	3/28	46	12.4	15.8	13.3	22						
Shrine Pass	3/26	66	20.2	21.7	18.4	16						
Grizzly Peak	3/25	61	18.6	19.2	19.1	16						
Glen-Mar Ranch	4/1	37	9.1	10.6	10.3	11						
Monarch Lake	3/30	39	8.8	13.6	--	10						
Granby	3/28	26	7.1	9.9	--	9						
Grand Lake	3/28	30	6.6	12.9	--	9						
Berthoud Summit	3/27	72	23.2	20.6	--	7						
Frazer View	3/27	49	13.7	14.0	--	7						
Gore Pass	3/28	35	9.4	13.5	--	7						
Frisco	3/25	32	8.6	11.4	--	7						
Snake River	3/25	31	7.8	11.2	--	7						
Summit Ranch	4/1	30	6.3	10.4	--	7						
Vail Pass	3/27	68	20.8	23.2	--	6						
Pando	3/26	42	12.7	13.8	--	6						
Kokomo	3/26	49	12.8	16.2	--	6						
Milner	3/26	56	15.9	16.4	--	6						
Blue River	3/30	40	11.6	11.7	--	1						
Jones Pass					17.2	--			1			
Ranch Creek	3/31	39	9.8	12.0	--	1						
Vasquez Creek	3/31	47	12.7	15.5	--	1						

* On adjacent drainage

** Average for courses with less than 15 years of record
during the period 1938-52 are partially estimated.

NS No Survey

(a) Air observed

SNOW COURSE MEASUREMENTS

April 1, 1958

SNOW COURSE	Depth 1958		Water Content In Inches		Years of Record		SNOW COURSE	Depth 1958		Water Content In Inches		Years of Record		
	Date	Inches	1958	1957	Avg.	**		Date	Inches	1958	1957	Avg.	**	
COLORADO RIVER DRAINAGE														
ROARING FORK														
Ind. Pass Tunnel	3/27	62	20.4	23.5	18.7	22	Rico	3/31	36	10.1	10.0	8.6	22	
North Lost Trail	3/31	50	14.6	23.1	14.8	21	Telluride	3/31	40	9.8	7.4	7.4	22	
Nast	4/1	28	5.5	10.6	6.2	21	Lizard Head	3/31	75	24.1	25.0	17.1	20	
Ivanhoe	3/29	62	16.5	21.6	18.5	10	Trout Lake	3/31	48	20.4	16.5	12.9	9	
Lift	3/31	64	16.6	26.4	--	--								
YAMPA RIVER														
Dry Lake	3/28	61	25.7	28.4	20.3	22	SAN RAFAEL RIVER							
Columbine Lodge*	3/31	77	25.6	30.1	23.5	22	Hntngtn-Horseshoe	3/27	93	35.2	28.1	26.3	28	
Elk River	4/1	62	19.5	20.6	17.4	22	Seeley Creek R.S.	3/28	73	23.8	22.3	16.8	28	
Lynx Pass*	3/28	46	12.4	18.8	13.3	22								
Routt Line		NS	NS	39.6	--	7	VIRGIN RIVER							
Rabbit Ears		NS	NS	38.9	--	7	Long Valley Jct.	3/28	11	3.1	0.0	5.5	21	
Yampa View	4/2	45	15.9	20.9	--	7	Harris Flat R.S.	3/28	39	13.5	6.7	9.4	27	
Flat Top		NS	NS	26.0	--	--	Duck Creek R.S.	3/28	71	18.7	16.6	17.4	23	
Bear River	3/28	45	12.2	14.6	--	2	Cedar Breaks	3/25	90	30.4	21.1	25.0	23	
Clark	4/1	39	12.5	15.6	--	2	Webster Flats	3/25	70	22.1	15.8	19.8	31	
Old Battle	4/2	96	33.8	38.5	32.7	22								
WHITE RIVER														
Burro Mountain	4/2	71	22.2	24.6	19.1	21	COLORADO R. (S. E. UTAH)							
Rio Blanco	4/2	51	18.7	24.1	16.2	22	LaSal Mt.	3/26	49	14.6	12.8	11.5	27	
PLATEAU CREEK														
Mesa Lakes	3/30	81	27.6	22.3	18.2	21	Buckboard Flat	3/26	51	15.8	14.7	15.3	28	
Trickle Divide	3/31	100	31.5	27.6	29.7	18								
GUNNISON RIVER														
Crested Butte	3/28	47	12.7	20.3	15.2	22	PRICE RIVER							
Park Cone	3/30	46	10.7	18.5	10.8	21	Indian Canyon*	4/2	57	14.8	11.0	11.4	28	
Alexander Lake	4/3	95	31.5	23.7	24.1	21	Gooseberry Res.	3/27	69	24.1	23.5	20.8	30	
Ironton Park		Snow Slide		19.3	14.4	21	Staley Ranch	3/31	31	10.6	10.6	6.2	21	
Trickle Divide	3/31	100	31.5	27.6	29.7	18	Dry Valley Divide	3/31	41	13.8	13.7	10.8	23	
Park Reservoir	3/2	101	30.9	28.5	27.4	18	Hntngtn-Horseshoe	3/27	93	35.2	28.1	26.3	28	
Porphyry Creek	4/1	65	19.7	23.0	17.5	18	Mud Creek #2	3/31	53	17.1	17.7	--	3	
Kannah Cr.		NS	NS	30.0	26.8	11								
Lake City	4/1	48	14.7	11.2	--	9	DUCHESENE RIVER							
Spring Cr. Pass*		NS	NS	10.9	--	9	Lake Fork Mt.	3/25	52	13.6	10.4	13.0	27	
Cochetopa Pass*	3/31	28	7.3	7.3	--	9	Paradise Park	3/31	58	12.8	11.0	13.4	26	
McClure Pass	3/31	56	16.1	23.7	--	8	Mosby Mt. (L)	3/31	58	12.7	9.2	12.4	27	
Red Mt. Pass	4/2	117	40.5	36.2	--	7	Brown Duck Lake	NS	NS	15.7	19.4	13		
Blue Mesa		NS	NS	13.5	--	--	Indian Canyon	4/2	57	14.8	11.0	11.4	28	
SAN JUAN RIVER														
Wolf Creek Pass*	3/31	85	26.1	42.0	31.1	22	UPPER GREEN RIVER (UTAH)							
Upper San Juan	3/31	107	36.2	45.2	34.6	22	Hewinta R.S.	4/2	46	11.9	9.4	9.7	24	
Granite Peaks	3/31	18	5.8	7.6	7.0	17	Hole-in-Rock	3/31	33	7.2	7.0	6.4	27	
La Plata		NS	NS	27.5	--	8	King's Cabin (U)	4/1	47	11.5	9.5	11.4	28	
Wolf Creek Summit	3/31	98	29.4	40.7	--	7	King's Cabin (L)	4/1	38	10.2	8.1	10.4	28	
Chama Divide*	4/1	16	5.7	2.2	2.6	18								
Chamita*	4.1	37	12.3	13.7	9.6	15	GREEN RIVER (WYOMING)							
ANIMAS RIVER														
Ironton Park*		NS	NS	19.3	14.4	21	Dutch Joe	3/31	32	7.5	9.2	8.4	18	
Cascade	4/2	60	15.3	18.0	12.8	22	Mulligan Park	3/31	36	10.6	10.4	10.8	22	
Spud Mt.	4/2	118	39.7	33.4	11.6	7	Kendall R.S.	4/1	30	8.6	12.1	11.1	21	
Molas Lake	4/2	69	19.5	21.0	13.8	7	Loomis Park	4/3	47	15.4	18.1	16.7	21	
Howardville	4/2	61	17.3	15.0	11.5	7	Snyder Basin R.S. #2	3/36	52	16.5	16.6	--	3	
Mineral Creek	4/2	73	21.2	19.5	14.2	7	Piney-LaBarge	3/26	59	20.5	19.1	18.5	21	
Red Mt. Pass*	4/2	117	40.5	36.2	30.5	7								
GILA RIVER														
							Frisco Divide		8	3.9	0.0	0.5	18	
							State Line		6	2.0	0.0	0.5	18	
							Taylor Creek		0	0.0	0.0	0.0	12	
							Inman		0	0.0	0.0	0.0	8	
							Nutrioso		4	0.9	0.0	0.6	17	
							Beaver Head		12	5.5	0.0	0.9	18	
							Coronado Trail		9	3.1	0.0	1.3	16	
							Rose Canyon		--	0.0	0.0	0.3	8	
							Bear Wallow		--	0.0	0.0	1.1	8	

* On adjacent drainage

** Averages for courses with less than 15 years of record during the period 1938-52 are partially estimated.

NS No Survey

(a) Air observed

SNOW COURSE MEASUREMENTS

April 1, 1958

SNOW COURSE	Depth	Water Content		Years of Record	SNOW COURSE	Depth	Water Content		Years or Record					
	1958	In Inches	1958			Date	1958	Inches						
**														
COLORADO RIVER DRAINAGE														
SALT RIVER														
Forest Dale	0	0.0	0.0	0.0	18									
McNary *	0	0.0	0.0	0.2	18									
Nutrioso *	4	0.9	0.0	0.6	17									
Coronado Trail	9	3.1	0.0	1.3	16									
Milk Ranch	0	0.0	0.0	0.0	14									
Workman Creek	0	0.0	0.0	1.4	5									
Maverick Fork	40	14.0	6.7	3.3	6									
Baldy *	34	11.9	0.0	3.1	8									
Fort Apache *	32	10.3	3.9	5.6	8									
Pacheta	0	0.0	0.0	1.0	5									
VERDE RIVER														
Iron Springs *	0	0.0	0.0	0.0	11									
Camp Wood	0	0.0	0.0	0.0	11									
Mingus Mountain	0	0.0	0.0	0.0	9									
Mormon Lake *	7	1.9	0.0	4.2	9									
Fort Valley *	1	0.2	0.0	1.2	11									
Chalendar *	1	0.2	0.0	1.6	11									
Munds Park	0	0.0	0.0	0.5	5									
Casner Park	T	T	0.0	0.8	4									
Mormon Mt.	13	4.1	0.0	2.8	6									
Happy Jack	---	--	--	3.1	3									
LITTLE COLORADO RIVER														
Forest Dale	0	0.0	0.0	0.0	18									
McNary	0	0.0	0.0	0.2	18									
Nutrioso	4	0.9	0.0	0.6	17									
Mormon Lake	7	1.9	0.0	4.2	9									
Fort Valley	1	0.2	0.0	1.2	11									
Mormon Mt.	13	4.1	0.0	2.8	6									
Happy Jack *	--	--	--	3.1	3									
Gentry	5	1.5	0.0	0.1	5									
Heber	6	1.6	0.0	0.5	4									
Canyon Creek	New Location		--	--	--									
WILLIAMS RIVER														
Iron Springs	0	0.0	0.0	0.0	11									
Camp Wood *	0	0.0	0.0	0.0	11									
Willow Ranch	--	--	--	0.0	6									
LOWER COLORADO RIVER														
Bright Angel	44	12.1	12.9	8.3	10									
Grand Canyon	3	0.1	0.0	0.9	10									
Fort Valley	1	0.2	0.0	1.2	11									
Chalendar *	1	0.2	0.0	1.6	11									
RIO GRANDE DRAINAGE														
RIO GRANDE IN COLORADO														
Wolf Creek Pass	3/31	85	26.1	42.0	31.1	22								
Upper Rio Grande	3/31	39	11.7	9.5	7.0	20								
Santa Maria	4/1	26	6.9	7.6	4.7	19								
RIO GRANDE IN NEW MEXICO														
Red River	3/30	30	9.8	11.1	7.9	21								
Taos Canyon	3/29	23	7.3	3.5	5.7	19								
Aspen Grove	3/31	24	7.5	4.3	3.4	21								
Hematite Park *	3/29	29	7.7	7.6	5.2	20								
Tres Ritos	4/3	31	9.0	7.2	5.2	20								
Payrole	4/1	39	11.7	11.3	9.7	18								
Cordova	4/2	61	13.4	15.7	12.8	16								
Big Tesuque	4/1	30	9.5	5.8	5.4	16								
Elk Cabin	3/31	21	8.2	1.3	0.7	9								
Rio En Medio	4/1	50	13.4	11.1	--	8								
Quemazon	3/31	57	17.4	9.8	---	8								
Fenton Hill	3/31	27	8.2	1.2	--	6								
CANADIAN RIVER														
Hematite Park	3/29	29	7.7	7.6	5.2	21								
Tres Ritos	4/3	31	9.0	7.2	5.2	20								
Cordova	4/2	61	13.4	15.7	12.8	16								

* On adjacent drainage

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(a) Air observed

Federal - State - Private
COOPERATIVE SNOW SURVEYS

—
Furnishes the basic data
necessary for forecasting
water supply for irrigation,
domestic and municipal water
supply, hydro-electric power
generation, navigation,
mining and industry

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“WATER IS THE WEST'S GREATEST RESOURCE”